In the Claims:

Claim 1 (currently amended):

1. A device, comprising:

an assembled structure of a plurality of intimately adjoined carbonized carbon tubes, said assembled structure is prepared according to a process including the steps of:

coating a plurality of fibers with a carbonizable carbon-containing material to form a coating layer on each of said plurality of fibers;

assembling said plurality of coated fibers to form an assembled matrix;

binding said assembled matrix with one or more binding agents;

removing said plurality of fibers; and

carbonizing said coating layer and the residue of said fibers to form said assembled structure of the plurality of intimately adjoined carbonized carbon tubes.

Claim 2 (original):

2. The device according to claim 1, wherein said fibers are selected from the group consisting of monofilaments, yarns, woven cloths, non-woven fabrics, and a combination thereof.

Claim 3 (original):

3. The device according to claim 1, wherein the binding step utilizes a chemical material as the binding agent, selected from the group consisting of polymer, oligomer, resin, adhesive, sol gel, metal oxide, metal, ceramic, cement, epoxy resin, and a combination thereof.

Claim 4 (original):

4. The device according to claim 3, wherein the chemical material is thermally more stable than the coating material.

Claim 5 (original):

5. The device according to claim 3, wherein the chemical material is thermally less stable than

the coating material.

Claim 6 (original):

6. The device according to claim 1, wherein said binding agent is a chemical reagent that is able to chemically or physically interact with the surfaces of said coating layers and result in interfacial bonding structures among said carbon tubes.

Claim 7 (original):

7. The device according to claim 1, wherein said binding agent is a chemical reagent that is able to physically wet or swell said coated fibers totally or in part and render said coated fibers sticking to or interpenetrating into each other at the contacted surfaces.

Claim 8 (original):

8. The device according to claim 1, wherein the binding step utilizes a crosslinking reagent as the binding agent, selected from the group consisting of peroxide, hydroperoxide, azo compound, redox initiator, photoinitiator, sulfur, and a combination thereof.

Claim 9 (original):

9. The device according to claim 1, wherein the binding step utilizes a binding agent that is carbonizable.

Claim 10 (original):

10. The device according to claim 1, wherein the binding step utilizes an energy beam as the binding agent, selected from the group consisting of lasers, ultraviolet light, visible light, high energy radiations, g-ray, x-ray, electrons, high-speed particles, photons, and a combination thereof.

Claim 11 (original):

11. The device according to claim 1, wherein the binding step utilizes a reactive atmosphere as the binding agent, selected from the group consisting of plasma, hot air, ozone, and a combination

thereof.

Claim 12 (original):

12. The device according to claim 1, wherein the binding step utilizes an energy flux as the binding agent, selected from the group consisting of microwave, infrared radiation, heat, and the combination thereof.

Claim 13 (original):

13. The device according to claim 1, wherein the binding step is further repeated utilizing the same or different types of binding agents.

Claim 14 (original):

14. The device according to claim 1, wherein the assembling step utilizes an assembling method selected from the group consisting of packing, weaving, knitting, netting, threading, sewing, stitching, stringing, wiring, tying, braiding, wrapping, binding, fastening, winding, stapling, and a combination thereof.

Claim 15 (currently amended):

15. The device according to claim 1, ~~wherein the removing step and the carbonizing step are performed concurrently~~ which has a honeycomb-like structure.

Claim 16 (currently amended):

16. A device of an assembled structure, comprising:

a plurality of intimately adjoined carbonized carbon tubes wherein said plurality of carbonized carbon tubes include:

carbonized coating material; and

carbonized fiber residue; and

a binding element which binds the plurality of intimately adjoined carbonized carbon tubes.

Claim 17 (original):

17. The device according to claim 16, wherein the binding element is a carbonized binding agent.

Claim 18 (original):

18. The device according to claim 16, wherein the binding element is interfacial covalent bonding structures at the contacted surfaces between said carbon tubes.

Claim 19 (original):

19. The device according to claim 16, wherein the binding element is interfacial covalent bonds at the contacted surfaces between said carbon tubes.

Claim 20 (original):

20. The device according to claim 16, wherein the binding element is inorganic network structures, which hold or bind said assembled structure of carbon tubes.

Claim 21 (original):

21. The device according to claim 16, wherein the binding element is a fused and interpenetrated interfacial structure of said carbonized coating material.

Claim 22 (currently amended):

22. The device according to claim 16, ~~wherein said assembled structure of carbon tubes is a rod or cylinder with the averaged axis of said carbon tubes being aligned along with the axis of said assembled structure~~ which has a honeycomb-like structure.

Claim 23 (original):

23. The device according to claim 16, wherein said assembled structure of carbon tubes is a plate or mesh.

Claim 24 (withdrawn):

24. A method for making an assembled structure of carbon tubes, comprising the steps of:
coating a plurality of fibers with a coating material to form a coating layer over the fibers;
assembling the coated fibers into an assembled matrix;
binding the assembled matrix with one or more types of binding agents;
removing the fibers; and
carbonizing the coating layers and residue of the fibers to form said assembled structure of carbon tubes.

Claim 25 (withdrawn):

25. The method according to claim 24, wherein said fibers are selected from the group consisting of monofilaments, yarns, woven cloths, non-woven fabrics, and a combination thereof.

Claim 26 (withdrawn):

26. The method according to claim 24, wherein the binding step utilizes a chemical material as the binding agent, selected from the group consisting of polymer, oligomer, resin, adhesive, sol gel, metal oxide, metal, ceramic, cement, epoxy resin, and a combination thereof.

Claim 27 (withdrawn):

27. The method according to claim 26, wherein the chemical material is thermally more stable than the coating material.

Claim 28 (withdrawn):

28. The method according to claim 26, wherein the chemical material is thermally less stable than the coating material.

Claim 29 (withdrawn):

29. The method according to claim 24, wherein said binding agent is a chemical reagent that is able to chemically or physically interact with the surfaces of said coating layers and result in interfacial bonding structures among said carbon tubes.

Claim 30 (withdrawn):

30. The method according to claim 24, wherein said binding agent is a chemical reagent that is able to physically wet or swell said coated fibers totally or in part and render said coated fibers sticking to or interpenetrating into each other at the contacted surfaces.

Claim 31 (withdrawn):

31. The method according to claim 24, wherein the binding step utilizes a crosslinking reagent as the binding agent, selected from the group consisting of peroxide, hydroperoxide, azo compound, redox initiator, photoinitiator, sulfur, and a combination thereof.

Claim 32 (withdrawn):

32. The method according to claim 24, wherein said binding agent is carbonizable.

Claim 33 (withdrawn):

33. The method according to claim 24, wherein the binding step utilizes an energy beam as the binding agent, selected from the group consisting of lasers, ultraviolet light, visible light, high energy radiations, g-ray, x-ray, electrons, high-speed particles, photons, and a combination thereof.

Claim 34 (withdrawn):

34. The method according to claim 24, wherein the binding step utilizes a reactive atmosphere as the binding agent, selected from the group consisting of plasma, hot air, ozone, and a combination thereof.

Claim 35 (withdrawn):

35. The method according to claim 24, wherein the binding step utilizes an energy flux as the binding agent, selected from the group consisting of microwave, infrared radiation, heat, and a combination thereof.

Claim 36 (withdrawn):

36. The method according to claim 24, wherein the binding step is further repeated utilizing the same or different types of binding agents.

Claim 37 (withdrawn):

37. The method according to claim 24, wherein the assembling step utilizes an assembling method selected from the group consisting of packing, weaving, knitting, netting, threading, sewing, stitching, stringing, wiring, tying, braiding, wrapping, binding, fastening, winding, stapling, and a combination thereof.

Claim 38 (withdrawn):

38. The method according to claim 24, wherein the removing step and the carbonizing step are performed concurrently.